

**AN ADVOCACY CAMPAIGN TO PROMOTE PHYSICAL  
ACTIVITY AMONG ADOLESCENTS IN  
FAIRFAX COUNTY, VIRGINIA**

**Johns Hopkins University School of Hygiene  
And Public Health**

**Integrating Experience**

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## EXECUTIVE SUMMARY

Physical inactivity is one of the leading causes of disease and premature death in the United States. The risk of all-cause mortality in physically inactive persons is twice that in persons who are physically active. Higher levels of physical activity are associated with a lower risk of mortality. Regular physical activity confers many health benefits including preventing cardiovascular disease, hypertension, diabetes, colon cancer and some mental illnesses. There have been a variety of types of physical activity shown to have these health benefits and it is believed that most Americans can achieve desirable levels of regular physical activity.

Physical activity levels are unacceptably low among all age groups in America and the physical activity rates and trends among adolescents are disturbing. In 1997, less than two-thirds of high school students had any form of sustained physical activity on three or more of the past seven days. Also, regular physical activity levels decrease as adolescents get older. While 73 percent of ninth grade students reported regular physical activity in 1997, the proportion of twelfth grade students who exercised regularly was 58 percent. Physically inactive adolescents are more likely to remain inactive in adulthood. In Fairfax County, Virginia, adolescents have these same low rates and trends in physical activity.

Determinants of physical inactivity are considered using an ecological model for behavior. Factors are categorized as intrapersonal, interpersonal, institutional, community, policy or environmental. Interventions to increase physical activity in adolescents must consider these factors. School-based physical activity programs requiring students to be physically active have been shown to increase the proportion of adolescents who get recommended levels of exercise. Also, programs designed to increase awareness of the benefits of physical activity and improve attitudes in adolescents and parents toward becoming more active have been successful. Fairfax County Public Schools, like most schools in the US, do not require high school students to take physical education classes in each high school year and enrollment rates are declining.

Fairfax County, Virginia shares an imperative with the rest of America to increase the proportion of adolescents and young adults who are regularly physically active. It is necessary to reverse trends in

physical activity in youth in order to interrupt the chain events leading to chronic disease, disability and premature mortality. Likewise, it is critically important to increase the likelihood youth will adopt lifelong habits of regular physical activity.

An advocacy campaign has been developed to increase the proportion of adolescents in Fairfax County who get regular exercise and to increase positive attitudes in adolescents and young adults toward becoming more physically active. A key objective for the campaign is to get the Fairfax County School Board to implement a comprehensive school-based physical activity program in high schools. A three-part program is recommended. The program parts are: 1) A curriculum requirement for high school students to be regularly physically active. 2) A media campaign to increase awareness of the benefits of physical activity and prompt positive behavior change. 3) A plan to ensure that appropriate environments are available for physical activities.

The advocacy campaign presented includes an analysis of key stakeholders in the education and public health arenas, a recommended school program, a comprehensive strategy to make change and a campaign evaluation. Critical components of the campaign strategy are building a coalition, tactics to influence decision-makers and stakeholders and the media. This advocacy campaign will increase positive attitudes in Fairfax County residents toward developing lifelong habits of physical activity and will increase the proportion of adolescents who are regularly physically active.

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# **An Advocacy Campaign to Promote Physical Activity**

## **I. INTRODUCTION**

Physical inactivity is one of the leading causes of preventable premature mortality in the United States. A sedentary lifestyle and lack of regular physical activity have been established as causes of cardiovascular disease and death, some cancers, obesity, and diabetes mellitus.<sup>1</sup> Conversely, regular physical activity has been shown to prevent many diseases and premature deaths, decrease disability and improve quality of life.<sup>2</sup> Many of the health benefits of physical activity are direct, such as decreased mortality from cardiovascular events and the prevention of hypertension. Other health effects are indirect such as the positive impact of regular physical activity on weight control.

The problem of physical inactivity is found in all age groups but it is particularly worrisome that American adolescents are becoming increasingly inactive. Though the health consequences may not occur until much later in life many adolescents are starting on a path that may lead to a lifelong habit of inactivity.<sup>3</sup> Like tobacco use, if adolescents become “addicted” to a sedentary lifestyle as teenagers, changing behavior to one of regular physical activity is much more difficult in adulthood. One contributing factor is that parents and other young adults are not regularly physically active and this sets a powerful and dangerous example for adolescents. Adults have a powerful role model effect on physical activity in adolescents<sup>4</sup> but increasing physical activity rates in adults is difficult.<sup>5</sup> Therefore, intervention directly targeting adolescents is imperative in order to develop lifelong habits of exercise and activity that prevent premature morbidity and mortality. It has been established that school based programs are very effective in changing physical activity levels of children and adolescents.<sup>6</sup>

A public health advocacy campaign has been developed to establish a practical school-based physical activity program in public high schools in Fairfax County, Virginia. The objectives for the program will parallel those in the Healthy People 2010 Objectives set to be released in January 2000. The campaign will target the School Board to adopt a three-part program to increase the proportion of Fairfax County adolescents who participate in regular sustained physical activity. The proposed program employs an ecological model of behavior and addresses policy and environmental variables of physical activity among adolescents.<sup>7</sup> The parts of the program include curriculum requirements for physical activity, ensuring appropriate environments for physical activity and a media campaign to increase awareness, positive attitudes and actions toward becoming more physically active.

The advocacy campaign will have goals and objectives that serve the interests of the community. Coalition building, identification of key stakeholders, and the media will be used in a comprehensive strategy to influence

decision-makers and stakeholders in the county. A framework for evaluating the advocacy campaign has also been developed.

## **II. BACKGROUND**

### **A. Problem Definition**

Physical activity and exercise are common terms for discussing body movement and exertion intended to improve cardiovascular fitness, muscle strength, coordination and flexibility. Physical activity refers to bodily movements intended to increase calorie expenditure above baseline levels. Exercise generally implies a regimented program to improve physical fitness. Physical fitness means the ability to carry out a variety of life activities with vigor and without undue fatigue.<sup>8</sup>

For this campaign physical activity and exercise will be used interchangeably to refer to all leisure-time, sports, recreation and other personal activities that result in repetitive body motion and cardio-pulmonary demand to achieve energy expenditure above an individual's baseline level. This discussion will not elaborate on the plethora of methods, measures and recommendations that can be used to achieve and assess physical activity. It will instead focus on a strategy to reach objectives for youth physical activity outlined in the Healthy People 2010 draft objectives. This section will discuss the basis for recommending these objectives for physical activity as important to improving public health.

**Adverse effects of physical inactivity:** A large proportion of premature morbidity and mortality from cardiovascular disease, diabetes, some cancers and mental disease can be attributed to sedentary lifestyles. Physical inactivity is an independent risk factor for cardiovascular disease, hypertension, diabetes mellitus and colon cancer. It has also been implicated in several other cancers and depression.<sup>9</sup>

Looking at overall mortality related to physical activity, studies show that sedentary people have a 1.2 to 2 times greater risk of dying during the study interval compared to people who are very active physically.<sup>10</sup> While associations are even higher when cardiorespiratory fitness is measured rather than reported physical activity levels, the variable to be influenced in this campaign is the behaviors of youth that are known to improve fitness. Physically inactive persons have a relative risk of 1.9 for developing coronary heart disease (CHD) compared to regularly physically active persons.<sup>11</sup>

**Beneficial effects of physical activity:** There are multiple health benefits associated with regular physical activity, increasing levels of activity and high levels of cardiovascular fitness. The risk of mortality from

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cardiovascular disease decreases with increasing levels of regular physical activity in a dose-response fashion and no threshold has been found for the level of physical activity at which these benefits begin.<sup>12</sup> Also, many types of activity are known to confer health benefits. For example, elderly adults who increased activity from completely sedentary to any regular physical activity had improved physical functioning and decreased risk of cardiovascular events.<sup>13</sup> Importantly, a variety of activities that are self-selected, called lifestyle physical activities, have also been found to confer health benefits and satisfy recommendations for regular physical activity. Lifestyle physical activities include such things as walking, biking, and dancing.<sup>14</sup> Therefore, it is reasonable to include many activities that are appealing to youth such as biking, dancing and skating in intervention strategies.

There are measurable physiological responses to exercise that result in the health benefits associated with regular physical activity. The most widely recognized are the effects on the cardiovascular and musculoskeletal systems but there are proven desirable effects on the immune, endocrine and metabolic processes as well. One example of measurable physiological effects is improved maximum oxygen uptake ( $\text{VO}_2 \text{ max}$ ) resulting from regular physical activity. Maximum oxygen uptake is one of several measures of physical fitness. Regular physical activity can increase oxygen uptake and  $\text{VO}_2 \text{ max}$  can be maintained with regular exercise.<sup>15</sup> Persons who are more physically fit have a lower risk of cardiovascular events and all-cause mortality.<sup>16</sup>

Blood pressure control is improved in patients with hypertension and the risk of developing hypertension is lower in physically active compared to sedentary persons.<sup>17</sup> The same is true for patients with diabetes mellitus. Regular physical activity has both direct effects on the incidence and severity of these two diseases and indirect benefits through improved weight control. Similarly, risk for developing obesity is decreased and weight loss is aided by physical activity.<sup>18</sup> The risk of colon cancer is reduced in those more physically active, probably due to a decreased transit time in the intestinal tract.<sup>19</sup>

There is evidence of immediate impacts from increased physical activity in youth on diseases that may manifest in youth as well as on measures of precursors of chronic diseases that manifest in adulthood. Increasing physical activity can favorably influence lipid profiles in those youth at high risk of CHD and can decrease blood pressure in youth with hypertension.<sup>20</sup> There is some evidence that physical activity levels in children and adolescents are inversely related to body mass index but they are not conclusive.<sup>21</sup> Other health benefits to youth of physical activity include better self-esteem, improved cognitive functioning and decreased anxiety in youth.<sup>22</sup>



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Many of the health benefits of increasing physical activity do not immediately impact adolescents and young adults. What is critical, however, is that those who are physically active when they are young are more likely to remain physically active.<sup>23</sup> Also, the chain of events leading to many chronic illnesses start in children. Atherosclerosis, obesity, diabetes and hypertension are common in middle and older-aged Americans and may be interrupted through beginning healthy behaviors in adolescence or young adulthood.<sup>24</sup> Levels of physical activity in adolescents must be increased to prevent disease and disability as well as to increase the likelihood that as adults they have lifelong habits of regular physical activity.

### **B. Magnitude of the Problem in Fairfax County, Virginia**

Fairfax County, Virginia is a large, economically robust suburban community near Washington, D.C. The population in 1998 was estimated to be about 930,000, with 70,000 adolescents ages 14-19 years.<sup>25</sup> The Fairfax County Public Schools is the largest public school system in Virginia and 12<sup>th</sup> largest in the United States. There are 20 high schools in the county system and these schools enroll 13% of Virginia's high school students.<sup>26</sup> The Fairfax County Public Schools system has an excellent reputation for its academic programs but like most public school systems in the United States, senior high school students are not required to enroll in a physical education class each of their high school years. As a result, there is a trend of decreasing enrollment in physical education among American adolescents.<sup>27</sup>

The most robust data on youth health-related behaviors are collected in the national Youth Risk Behavior Survey (YRBS). The YRBS contains data on levels of physical activity for adolescents in 18 states, the District of Columbia and several US territories.<sup>28</sup> Virginia, however, has not participated in the YRBS since 1993. The State of Virginia does produce a periodic state health report with data reported for each health district (Fairfax Health District is one). The report does not yet include data on physical activity.<sup>29</sup> Finally, neither the Fairfax County Health Department nor the Fairfax County Public Schools has survey data on physical activity levels among county adolescents.<sup>30</sup>

Nationwide data on physical activity among adolescents can be used to estimate the level of physical activity among adolescents in Fairfax County. It is reasonable to assume that this large and demographically diverse community does not differ from the overall national level results.<sup>31,32</sup> The 1997 YRBS results show that participation in regular sustained physical activity among high school students declined with each successive year of school. Among ninth grade students 73 percent reported regular physical activity compared to 58 percent of

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students in grade twelve (see Appendix, Figure 1).<sup>33</sup> Also, the percentage of students who get sustained physical activity three times a week has decreased slightly between 1991 and 1997 (see Appendix, Figure 2).<sup>34</sup> These trends are found across gender and racial groups. The proportion of girls participating in regular physical activity is less than for boys and that for adolescent African American girls is less than for adolescent white girls.<sup>35</sup> In 1997, among 19 year olds, less than 50 percent reported having vigorous physical activity and less than 35 percent reported moderate physical activity during the previous seven days.<sup>36</sup> Physical activity levels remain low in 20-21 year old young adults (See Appendix, Figure 3).<sup>37</sup>

It can be estimated from this data that as many as 25,000 (35%) Fairfax County adolescents do not get regular vigorous physical activity and among 19 year olds who graduate or leave high schools in the county, at least 4700 (50%), are not moderately or vigorously physically active.

Physical education classes are elective for Fairfax County high school juniors and seniors and the number of students enrolling in physical education has been decreasing. Similarly, for high school freshmen and sophomores the required health and physical education classes have had increasing amounts of didactic requirements that displace time available for exercise and body movement. Programs such as the 12-week driver education requirement are part of the 10<sup>th</sup> grade physical education curriculum. It is estimated that for those students enrolled in physical education classes only 45-50% of class time is used for physical activity and some of this time is needed for changing clothes and other activities.<sup>38</sup>

### **C. Determinants of Inactivity and Barriers to Physical Activity**

An ecological model of behavior is useful for identifying determinants of inactivity and barriers to physical activity in adolescents.<sup>39</sup> The behavioral variables can be considered in categories of intrapersonal, interpersonal, institutional, community and policy factors. Also, environmental factors that create the setting in which physical activity takes place must be considered. Though there is limited research specific to adolescents, some issues can be presented to better shape interventions targeting youth physical activity. Intrapersonal, interpersonal and environmental factors influencing youth physical activity will be discussed here. Institutional, community and policy issues are considered later.

**Intrapersonal factors:** Self-efficacy, awareness of health benefits and enjoyment are several of the major personal factors influencing physical activity levels in adolescents. Students who have more confidence in their abilities have higher rates of participation in sports and other physical activities. Emphasis on competitive sports

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may cause some adolescents who are not interested or successful in competitive sports to move away from regular physical activity. Similarly, there is a positive association between awareness of health benefits and physical activity levels in youth.<sup>40</sup> A third personal factor is the enjoyment derived from physical activity. When activities are enjoyable to youth, participation is greater.<sup>41</sup> Individuals with special needs can face formidable barriers to achieving desired levels of physical activity. Physically handicapped youth and those with chronic illnesses such as asthma and diabetes may adopt inactive lifestyles if adequate attention isn't directed to removing barriers. Not just physical space and equipment, but parental participation, trained personnel, dietary support and other ecological considerations are determinants in youth with special needs.<sup>42</sup> Lack of time is another reason many adolescents don't participate in regular physical activity.<sup>43</sup>

**Interpersonal factors:** There is a powerful effect of role models and peer participation on physical activity levels of adolescents. If parents encourage and demonstrate regular participation in physical activity, adolescents are more likely to exercise regularly. Similar associations are found if friends are physically active. When parents and young adults help organize and conduct sports and physical activity programs adolescents have greater rates of participation.<sup>44</sup>

**Environmental factors:** The quality and availability of space and equipment for physical activity have been positively associated with levels of physical activity. For example, the simple condition of children being outdoors instead of inside increases physical activity levels.<sup>45</sup> Also, children are less physically active during the winter when they are more likely to be confined indoors.<sup>46</sup> If youth cannot access outdoor and indoor facilities, participation in physical activity programs decreases.<sup>47</sup> There is a positive relationship between availability of transportation and exercise levels.<sup>48</sup> There are mixed conclusions about the effect of safety concerns on physical activity in youth. Some research indicates that in adolescents there is not an association of physical activity with convenience of facilities or their perceived safety.<sup>49</sup> Others conclude that fear of crime greatly reduces physical activity levels in children and ethnic minority parents were only half as likely to perceive neighborhoods as safe.<sup>50</sup>

Other characteristics of the environmental space to consider are air quality, ambient temperature and aesthetics. High levels of ozone and particulate matter greatly effect asthma and other respiratory conditions in both children and adults.<sup>51</sup> Adolescents cannot be expected to exercise if the air quality is poor or temperatures are extreme. Studies also suggest that more aesthetically appealing facilities and natural spaces are positively associated with physical activity.<sup>52</sup>

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The social environment of adolescents is important in physical activity levels. Children and adolescents in lower socio-economic status have substantially lower rates of participation in vigorous physical activity compared to those in higher income families.<sup>53</sup> The general increase in time spent indoors for work and other life activities as well as the decreased demand for physical exertion in meeting daily needs may contribute to lower levels of physical activity. It is not clear that watching television decreases physical activity but sedentary behaviors occupy more of youths' time than ever before.<sup>54</sup>

### **III. THE ACTION IMPERATIVE FOR FAIRFAX COUNTY**

The US Department and Health and Human Services has established national objectives for many health behaviors and outcomes in the Healthy People 2000 and Healthy People 2010 initiatives. These include objectives for youth physical activity (Table 1). The objectives are recognized as reasonable guidelines for local, state and national organizations to use in developing programs.

**Table 1.**  
**Healthy People 2010 Draft Objectives**

<b>Increase to at least 85 percent the proportion of young people in grades 9 through 12 who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.</b>
<b>Increase to at least 30 percent the proportion of young people in grades 9 through 12 who engage in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days.</b>
<b>Increase to at least 50 percent the proportion of young people in grades 9 through 12 who participate in daily school physical education.</b>
<b>Increase the proportion of the Nation's public and private elementary, middle/junior high, and senior high schools that require daily physical education for all students.</b>
<b>Increase to at least 50 percent the proportion of young people in grades 9-12 who spend at least 50 percent of school physical education class time being physically active, preferably engaged in lifetime physical activities, at least 3 times per week.</b>
<b>Increase the proportion of the Nation's public and private elementary, middle/junior high, and senior high schools that, in addition to physical education courses, teach about physical activity in required health education courses.</b>
<b>Increase the proportion of the Nation's public and private elementary, middle/junior high, and senior high schools that provide access to their physical activity spaces and facilities for young people and adults outside of normal school hours (i.e., before and after the school day, on weekends, and during summer and other vacations).</b>

Adapted from U.S. Department of Health and Human Services. *Healthy People 2010 Objectives: Draft for Public Comment*. Atlanta, GA: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, 1998.

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Fairfax County health and education programs can benefit greatly by adopting the national objectives targeting youth physical activity. These objectives should be the basis of programs within the county to improve health among high school students and to inculcate healthy lifestyles among youth and young adults. It is imperative that adolescents in Fairfax County become more physically active to realize the near-term and long-term health benefits that improved fitness confers. The school-based program advocated in this comprehensive advocacy campaign is intended to achieve this imperative.

The education system must be the focal point of this initiative. It has been shown that school-based programs can increase the proportion of adolescents who get regular activity.<sup>55</sup> One review of studies on school-based programs to increase physical activity showed that of the four completed studies of high school programs, desirable changes in physical activity were demonstrated in three.<sup>56</sup> Most school-based programs studied had multi-component interventions to improve knowledge about benefits of physical activity and to directly increase physical activity among students. Also, a 12-year follow-up study in Norway showed that childhood physical activity levels predicted adult levels of activity.<sup>57</sup>

Many types of physical activity can be utilized in schools to help students achieve recommended levels of exercise. Most schools already have considerable infrastructure and curriculum resources targeting physical and health education, recreation and extracurricular sports programs and these should be employed to reach objectives. What is needed then is a programmatic approach to reach physical activity objectives for all high school students.

The program in Fairfax County Public Schools should cover several key areas. The county schools physical education office should be responsible for monitoring and reporting on levels of physical activity in county high school students and overseeing all aspects of the program. Curriculum requirements should be implemented that ensure every student gets regular exercise. A media campaign is recommended to build support for physical activity programs and to reinforce behavior change. Proper environments and equipment must be available to meet students' needs.

This call for action recognizes the many activities currently sponsored or supported by the school system contribute positively to youth physical activity. It is necessary to fill gaps however, by ensuring all high school students get adequate exercise. Extracurricular sports programs, school after-care programs, and existing health education programs reach many students, and will not be discouraged. Similarly, the recommended school program should support and complement other activities in the community that include promoting physical activity. For

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example, recreation programs managed by the Fairfax County Parks and Recreation Department, some of which use Fairfax County Public Schools facilities,<sup>58</sup> contribute greatly to the physical activity needs of many adolescents. Many other community organizations and neighborhood associations also have robust sports programs that promote youth physical activity through swimming, soccer, and other programs.

The media campaign is recommended as part of the school-based program in order to reinforce in students, their parents and other young adults the importance of regular physical activity and to educate them in ways that will ensure everyone can achieve the recommended levels of activity. This is important for sustained community support for the school program, to reinforce positive behaviors in young adults and to develop better role models in parents of students in Fairfax County Public Schools.

A critical component of the imperative for Fairfax County to increase physical activity among youth is to ensure safe and effective environments for physical activity. Adolescents, and all citizens for that matter, must have the appropriate space and equipment to encourage exercise. The environment for physical activity has to be safe from crime, pollution and other hazards. Buildings and grounds must be designed and maintained so that they accommodate diverse types of activity, minimize chances of injuries and are aesthetically appealing. They should be available all day, in the evening and on weekends.

Widespread public support for school-based and other programs targeting youth physical activity is critical to address this imperative. School programs are sustainable only when parents, business leaders and public officials understand their value and are willing to make the necessary tradeoffs in terms of time, talent and funding. This advocacy campaign will help to reinforce both the near-term and long-term benefits for the students and the community.

Finally, Fairfax County can participate, where appropriate, in research that will contribute to the growing understanding of what influences youth to be inactive rather than active and how to encourage youth to develop lifelong habits of physical activity. There is increasing research activity in the area of youth physical activity. Many more studies can be expected that look at school and community-based programs, media campaigns and other interventions to improve health through physical activity. If the proposed school program is implemented, an evaluation of its implementation and outcomes may help other communities.

#### **IV. THE ADVOCACY CAMPAIGN**

The advocacy campaign will target the Fairfax County School Board as the key decision-maker with the authority to make curriculum changes and implement programs in the county school system. The discussion of the campaign includes the goals and objectives for the campaign, key stakeholders, the recommended school program, the campaign strategy and campaign evaluation.

##### **A. Goals and Objectives for the Campaign**

The goals for the advocacy campaign are to increase the community awareness of health consequences of inactivity and benefits of regular physical activity and to increase the proportion of adolescents and young adults in Fairfax County who participate in regular physical activity.

The campaign objectives are to:

- 1) Develop a coalition of community and national groups to actively support development and implementation of programs to increase physical activity among county adolescents.
- 2) Make county residents aware of the coalition and its efforts to promote physical activity in Fairfax County.
- 3) Have the Fairfax County School Board decide to develop and implement a comprehensive program for high school students that achieves national objectives for physical activity.
- 4) Increase positive attitudes in county residents toward becoming more physically active.
- 5) Increase the proportion of county youth and young adults who participate in regular physical activity.

Objective 1 is a near-term objective and should be accomplished within one year. Objectives 2 and 3 are intermediate-term objectives that may be achieved within two years of the campaign start. Objectives 4 and 5 are long-term objectives and measurable progress would be expected over five years.

##### **B. Key Stakeholders**

There are many stakeholders who may be interested in this proposal for Fairfax County Public Schools. They can be considered in two primary arenas, public education and public health. The emphasis will be on stakeholders in the education arena since that is where the school program would be operational. Public health stakeholders would likely act through campaign and program support. Public health support will be critical, however, because this program would be an integral part of disease prevention initiatives for which the public health community has primary responsibility. Many key stakeholders have already been identified and will be discussed

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below but other stakeholders important to the local campaign are expected to become apparent as the campaign progresses.

Stakeholders in the Fairfax County public education system include the Fairfax County School Board, the Virginia Board of Education, the Fairfax County Board of Supervisors, the Fairfax County Parent Teachers Association, the Fairfax County Parks and Recreation Department and the Fairfax County Taxpayers Alliance. It is important to explicitly include the county youth, their parents and other residents in the list of stakeholders in this campaign. Also, the elected representatives to county and state government and other civic leaders are clearly stakeholders of interest to this campaign.

National players in the education arena who could become active in this initiative include the US Department of Education and national education interest groups. The National Association for Sport and Physical Education has had an ongoing interest in improving physical education in Fairfax County.<sup>59</sup> National children's advocacy groups such as the Young Men's Christian Association and the Young Women's Christian Association may be active as well.

Stakeholders from the public health venue include the Fairfax County Health Department and the Virginia Department of Health Office of Prevention. The local chapters of the American Heart Association, the American Lung Association and the American Cancer Society have already been supporting school-based initiatives that promote youth physical activity.<sup>60</sup> National organizations that actively participate in youth physical activity issues include the President's Council on Physical Fitness and Sports<sup>61</sup> (and other offices within the US Department of Health and Human Services), the National Coalition for Promoting Physical Activity, and the Youth Fitness Coalition.<sup>62</sup>

### **C. Recommended School Program**

The overall goal for the school physical activity program is to increase the number of Fairfax County adolescents and young adults who regularly participate in physical activity and who are aware of the many health benefits of regular physical activity.

Four objectives are proposed for the school program and they are listed in order from most immediate to distant. They are to:

- 1) Add to the Fairfax County Public Schools curriculum a requirement for all senior high school students to have regular physical activity.



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- 2) Increase the proportion of high school students who participate in regular sustained physical activity on three or more days each week.
- 3) Increase the availability of safe, healthy environments and equipment for adolescents to use for physical activity.
- 4) Increase the proportion of adolescents and young adults who attended Fairfax County public schools that continue the habit of regular sustained physical activity.

The above goals and objectives can be achieved by implementing a three part program within the Fairfax County Public Schools. While this campaign recognizes that professional educators would be responsible for developing and implementing the school-based program, a recommended outline is provided to demonstrate a linkage between school program components and the public health objectives. One part is a requirement in the school curriculum that every high school student regularly participate in physical activity. Another part is for Fairfax County Public Schools to sponsor a media campaign targeting county adolescents and young adults with messages that increase knowledge of the benefits of physical activity and reinforce the development of lifelong habits of regular physical activity. The final part is a system-wide plan and program to ensure adequate physical environments and equipment are available to meet the physical activity needs of most students.

**Curriculum requirement for physical activity:** The requirement for all high school students to get regular physical activity would be aligned with the Healthy People 2010 objectives and would match detailed recommendations established by the CDC.<sup>63</sup> Specifically, all students would be required to get 20 minutes of vigorous physical activity at least three times weekly. Each student would be free to choose the type of physical activity they prefer and would be allowed flexible access to school facilities and equipment. Similarly, student participation in organized school-based or community-based extracurricular sports or recreation programs outside the school curriculum that meet the objectives for physical activity could fulfill the school requirement. Students who do not otherwise get adequate amounts of physical activity would achieve levels of exercise in physical education classes. The program would also have to ensure students with special needs can achieve the objectives. Health education curricula in physical education classes would continue as required in federal, state and local regulations.

**Media campaign:** The media campaign component of the school program would forge a partnership between the Fairfax County Public Schools, the county health department and organizations active in promoting

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physical activity to get messages to county adolescents, their parents and other young adults. The messages would employ social marketing concepts of media campaigns<sup>64</sup> to achieve general awareness of the risks of sedentary lifestyles and the benefits of physical activity, give cues to change behavior toward more exercise, increase the involvement of parents in promoting physical activity in adolescents and build grassroots support for school-based programs that promote physical activity.

The media campaign would include print and broadcast media. Materials prepared by national organizations, such as the public service announcement “Get Up! Get Out!” from the President’s Council on Physical Fitness and Sports and the CDC’s “It’s Everywhere You Go!”<sup>65</sup> may be used in combination with messages tailored to Fairfax County needs and resources.

**Environmental improvements:** A systematic approach is required to ensure indoor and outdoor spaces and equipment are available to achieve physical activity objectives. The public schools physical education program would have to be coupled with facilities and personnel management programs to incorporate the program needs into operating, training and capital budgets. The key facets of the indoor and outdoor environmental improvements that would be applied throughout the school system are aesthetics, security, proper equipment (and training in its use), ambient air quality, temperature and noise control, and hours of availability.<sup>66</sup>

**Program implementation and evaluation:** The Fairfax County Public Schools Office of Health and Physical Education would be responsible for development, implementation and evaluation of the detailed program. Along with the aforementioned program components, the office would analyze and evaluate program implementation and outcomes. It is expected that more resources would be needed beyond what is currently programmed for physical education. The office would need increased administrative and professional staff to execute the program. For example, an administrator and a grant writer might be hired for the program. Funding for the system-wide program could be sought in seed money from the state or county or through increasing the baseline for physical education in the Fairfax County Public Schools budget. Grants may be obtained from the CDC, US Department of Education or other government and private organizations.

### **D. Campaign Strategy**

The advocacy campaign strategy outlines the approach that will be used to reach the goals of increasing positive attitudes toward becoming more physically active and increased physical activity levels in county adolescents and young adults. The objectives will be achieved through coalition building, targeting the key

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decision-makers and tactics to influence decision-makers and stakeholders. The role of the media and funding the campaign are critical aspects of the strategy as well.

**Build supporting coalition:** A coalition of organizations will be formed to increase the likelihood the campaign objectives will be achieved. The union of influential and authoritative organizations and people will greatly enhance the effectiveness of the campaign by increasing the reach and credibility of the campaign, creating a forum for sharing ideas and information and fostering grassroots cooperation.<sup>67</sup>

The structure and function of the coalition will be adapted from the eight-step guide described by Cohen, Baer and Satterwhite.<sup>68</sup> The steps are: analyze program objectives to determine if a coalition is necessary; recruit the right people; devise preliminary objectives and activities; convene the coalition; anticipate the necessary resources; define elements of success; maintain coalition vitality; and make improvements through evaluation.

The coalition will be made up of people and organizations recruited from local and national positions important to support the campaign. Initially, membership will be sought from those organizations identified above as key stakeholders who would likely support the campaign. Others would be recruited by casting a wide net into the education and public health communities. Exposure through these communities should make the coalition known to those organizations interested in this initiative.

The coalition may decide to establish a lead agency for coordinating this campaign and any future work. For example, the Virginia Chapter of the American Heart Association has been promoting physical activity in youth in Fairfax County and may be asked to serve as lead agent. However, the exact requirements in terms of clerical activities, facilities and personnel may warrant a different approach to coordinating and focusing the coalition. The coalition will choose a name that reflects its agenda. Member organizations will be identified on the coalition letterhead when it is appropriate to do so. These and other details outlined by Cohen, Baer and Satterwhite<sup>69</sup> will be established as the coalition develops.

**Target decision-makers:** One objective of this campaign is to have the Fairfax County School Board decide to adopt the proposed high school program to increase physical activity. The School Board is made up of twelve elected members from the county.<sup>70</sup> It is the decision-making body responsible for policies and programs in the Fairfax County Public Schools system. It has extensive authority over the education budget and school curricula within the limits of federal, state and local statute and within regulations established by the Virginia Board of

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Education. The School Board has the authority to implement the proposed school program as well as some latitude to identify resources to support it.<sup>71</sup>

The School Board holds public meetings two times each month and will consider issues put forth by individuals and organizations. They have a policy and programs meeting at least once a year to decide issues for the coming academic year.<sup>72</sup> School Board members are accessible to individuals and organizations to discuss issues and proposals. The program could be implemented in the school curriculum as early as the 2001-02 academic year.

**Influencing decision-makers and stakeholders:** The coalition will use a number of approaches to reach decision-makers and stakeholders in order to influence their positions on the campaign initiative to promote physical activity in county youth. All efforts will be to increase their awareness of the imperative for physical activity, create a positive attitude toward programs that promote physical activity and move them toward taking decisive action to implement the proposed school program. The approaches used by the coalition are discussed briefly.

The coalition will regularly attend all public meetings of the Fairfax County Public Schools Board and committees relating to this initiative. Similarly, the coalition will attend relevant meetings of the Fairfax County Board of Supervisors and the Fairfax County Health Department. By doing so the coalition hopes to build a reputation as a credible and authoritative organization supporting the community interests.

The coalition will seek opportunities to make presentations on youth physical activity and the campaign proposals at meetings of stakeholders, coalition members and any other community forum. It will also be desirable to meet with state legislators from the area because they can influence both county and state officials. The intention is to widen the base of support for the campaign and to favorably influence school policies.

Letters under the coalition letterhead will be sent to decision-makers and key stakeholders on a regular basis. This will be a formal way to introduce the campaign and the coalition and to leave an open invitation to discuss the issues. One powerful tactic will be to demonstrate the linkages between this campaign and activities of organizations with similar objectives. For example, the Fairfax County Parks and Recreation Department is extensively involved in youth physical activity programs. They have cooperative programs with the public schools and other organizations and the potential to build upon common objectives between agencies may help influence the school board.

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The campaign may also recruit a high-profile spokesperson. For example, Michael Weiss, the 1998 National Men's Figure Skating Champion is an alumnus of the Fairfax County Public Schools. He has national stature as an athlete and is recognized locally.

The coalition will publish a periodic newsletter describing its activities and the campaign. A robust mailing list will be established. Fact sheets and other educational materials on physical activity will be produced and distributed as well. Booths or posters at conferences, conventions and local health fairs will be used whenever possible. This should be a very active tool of the campaign since many education and health-related meetings are held in and around Washington, DC.

It will be critically important for the advocacy campaign that the coalition anticipates opposing arguments against the initiative. The coalition will have to catalogue opposing arguments that might be used and consider ways to preempt their influence. The emphasis will be on understanding alternate views as valuable in public discourse rather than on discounting or avoiding them.

Some opposing arguments can be identified before the campaign begins. Within the education system there will be concern about the proposed school-based physical activity program becoming a mandate without sufficient resources. "Unfunded mandates" would mean more work for already over-worked educators and administrators. More physical education requirements would distract from crowded academic mandates as well. Groups such as the Fairfax County Taxpayers Alliance might oppose the proposal because they already see the public schools as ineffective in achieving learning objectives<sup>73</sup> and adding requirements for physical activity could fuel this argument. Certainly, any new public initiative can generate opposition from organizations backing other programs that would be competing for the same scarce resources. For example, programs that target the elderly might be in direct competition with programs that require more public funds for the school system.

**Role of Media:** The media can be a powerful tool for behavioral and social change<sup>74</sup> and will be used whenever possible to increase the public awareness and support for this campaign. One purpose in employing the media will be to increase county residents' awareness and attitudes about physical activity. This was discussed in the section on the recommended school program. The other purpose is to bring attention to the campaign effort to get the proposed program adopted by the school board. Both print and broadcast media can aid in this purpose.

Coalition members may already have relationships with newspaper, magazine, radio and television reporters and editors. Through these relationships, articles and interviews will be used to get the message out about

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the coalition and the campaign to promote physical activity in adolescents. Similarly, the coalition and its members will submit letters to editors of local newspapers in order to build interest and support at the grassroots level and to keep the imperative to promote physical activity on the agenda of governments and private organizations. The appeal of human-interest stories can be leveraged in the press as well. Every attempt will be made to personalize the negative impacts of sedentary lifestyles on the community and the positive effects of programs that promote youth physical activity. This may be done through articles in the lifestyle or health sections of newspapers or television programs.

**Funding:** Operating funds for the advocacy campaign will come from private donations, contributions by coalition members and through grants. These funds will be used to produce print and broadcast materials, buy supplies and pay for travel expenses. It is expected that most participants in the campaign will volunteer to do clerical and administrative work, attend meetings and make presentations.

### **E. Campaign Evaluation**

The campaign will be evaluated through summative and formative methods.<sup>75</sup> Qualitative and quantitative assessments will be used in the summative evaluation of progress toward meeting the campaign objectives described above. A yearly qualitative evaluation will be done to determine whether or not the objective to establish a viable coalition has been met. Coalition members will be asked to answer questions such as: Are there the right number of coalition members? Does membership include key organizations for promoting physical activity? Is there the right mix of representatives from influential organizations? The objective will be met if most responses are positive.

A survey will be used to quantitatively measure the campaign's success at meeting the intermediate-term objective of making community residents aware of the coalition. The survey will also be used to evaluate the long-term objectives to increase positive attitudes toward becoming more physically active and increase the proportion of county youth that are regularly physically active. Samples of county residents will be surveyed at baseline (during year one), year three and year five to quantitatively assess these three areas. The campaign will be successful in making residents aware of the coalition and its activities if the proportion of residents who recognize the coalition and its purpose to promote physical activity increases during each successive survey interval. Similarly, the objectives to increase positive attitudes and increase physical activity levels will be met if there are significant improvements in these measures in successive survey intervals.

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A qualitative evaluation will be made by the coalition of the objective to get Fairfax County Public Schools to develop and implement a comprehensive high school program that will achieve the Healthy People 2010 objectives for youth physical activity. At the end of the second and fourth years the coalition will study the physical education program in the school district to determine the extent to which it will increase physical activity, make available appropriate environments, and teach about physical activity. The objective will be met if the school program is likely to achieve the national objectives for youth physical activity.

Formative evaluation of the campaign will be an ongoing process. It is important to regularly evaluate the appropriateness of the campaign objectives, membership of the coalition, effectiveness of the campaign in reaching the public and stakeholders, exposure through the media and financial status of the campaign.<sup>76</sup> Questions that will be addressed every six months will include: Did the coalition accomplish what it planned to by this time? What exposure, support and resources have been gained to help toward the campaign goals? What changes in terms of policy, community relations, media coverage has the campaign seen? Is there a way to better allocate resources to accomplish campaign tasks? Are there things the coalition should stop doing because they are not helping to achieve objectives? Based on the ongoing evaluations, corrections and adjustments to the campaign will be made. Finally, evaluations of the advocacy campaign by external evaluators will be welcome and may be required by some grant providers.

## **IV. CONCLUSION**

The health consequences of inactivity and the benefits of a lifelong habit of regular physical activity are inextricably linked to the imperative to increase levels of physical activity in adolescents. Without effective interventions to reverse trends of decreasing physical activity in adolescents and young adults, much of the burden of preventable morbidity, mortality and disability in America will continue. Fairfax County, Virginia shares in the nationwide imperative to increase physical activity rates among its adolescents. School-based physical activity programs are effective at changing rates of physical activity in high school students and some of their effects last into young adulthood.

An advocacy campaign is proposed to increase awareness of the benefits of physical activity, increase positive attitudes toward becoming more physically active and increase the proportion of Fairfax County adolescents and young adults who participate in regular physical activity. The campaign goals and objectives will promote the interests of the community. The objectives include establishing in the Fairfax County Public Schools a physical

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activity program that ensures high school students get the recommended physical activity outlined in the Healthy People 2010 objectives. The proposed school program emphasizes maximum choice by students and their parents in how students would achieve desirable levels of physical activity. It includes a framework for making available the environment, staff and equipment necessary to promote exercise in adolescents, including those with special needs.

The advocacy campaign targets the Fairfax County School Board as the decision-maker. It also targets key stakeholders in the community who will both influence the School Board and contribute to the grassroots support for all initiatives in the county that promote physical activity. A coalition of influential allies in promoting physical activity will be established. The campaign will employ many tactics including directly influencing decision-makers and stakeholders and using the media to reach the public and community leaders. Finally, the campaign will be evaluated against the established objectives. It is expected that by achieving the near and intermediate-term objectives of the advocacy campaign, the proportion of Fairfax County adolescents and young adults who participate in regular physical activity will increase and more county residents will have positive attitudes toward becoming physically active.

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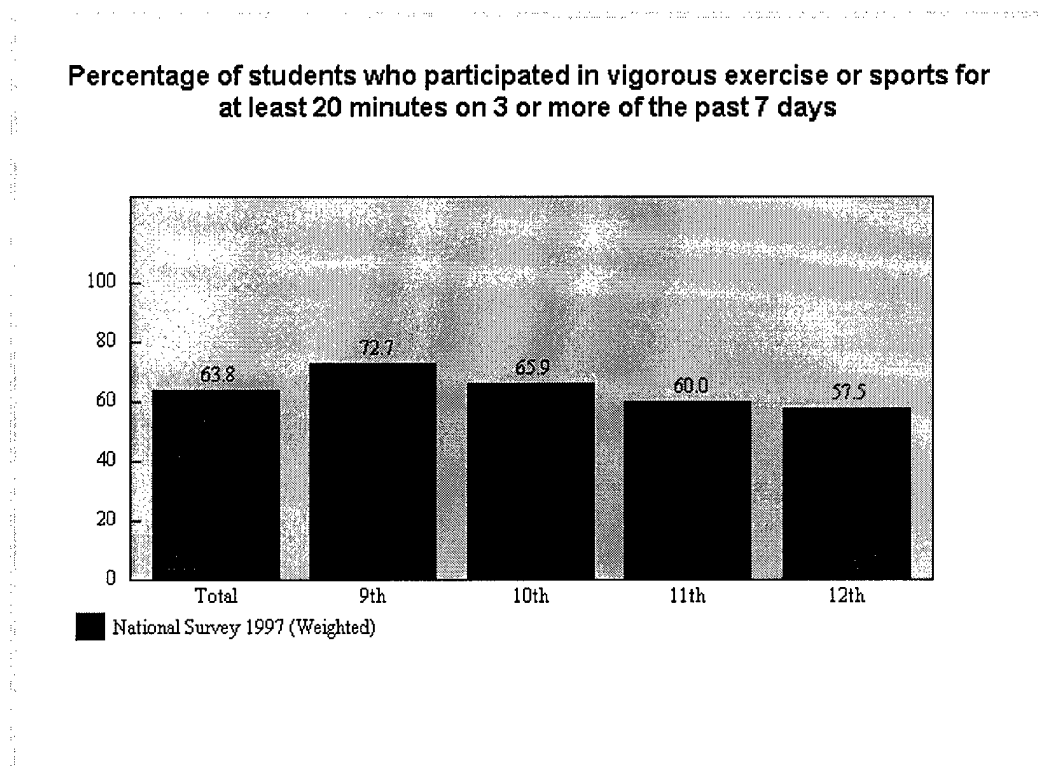
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## VII. APPENDIX

Figure 1.



Source for Figures 1 and 2: Centers For Disease Control and Prevention, Youth 97, Results from Youth Risk Behavior Survey, 1998.

Figure 2.

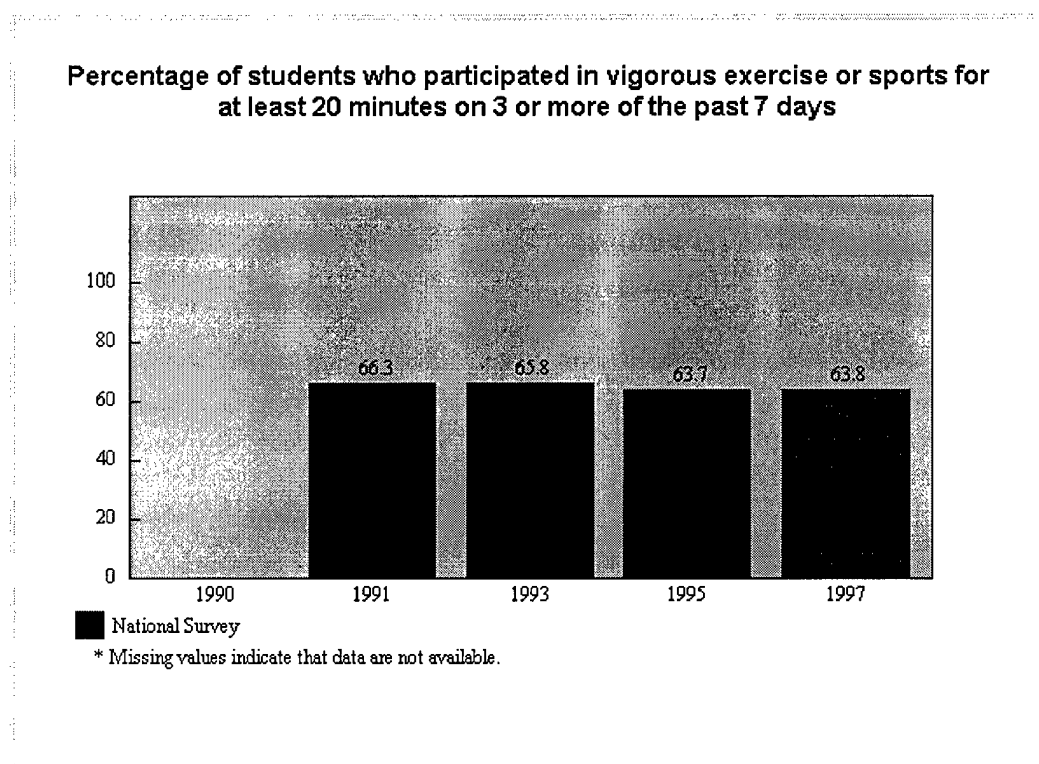


Figure 3.

